

6. (Currently Amended) The method of claim 1, further comprising:
concatenating the received binary data stream with at least one resynchronization mark,
wherein the at least one resynchronization mark is located in the middle of the received binary
data stream and the resynchronization mark and the encoded binary data stream are different.

7. (Original) The method of claim 6, further comprising:
detecting the at least one resynchronization mark to verify that the decoding process is
operating correctly.

8. (Currently Amended) The method of claim 1, wherein a data section of the
received binary data stream is encoded at ~~[[a]]~~ an encoding rate of m/n.

9. (Original) The method of claim 8, wherein the synchronization mark comprises
01000100001010001 and the m/n encoding rate comprises a 16/17 encoding rate.

10. (Currently Amended) The method of claim 8, wherein the data section is encoded
at ~~[[an]]~~ the ~~[[encoded]]~~ encoding rate of m/n and ^a~~the~~ resynchronization mark comprises a fixed
plurality of bits equivalent to bytes of the encoded binary data stream.

11. (Currently Amended) The method of claim 10, wherein the resynchronization
mark comprises 100000000010000000000100000000001 and the m/n encoding rate ~~encoded~~
~~bit-sequence~~ comprises a 16/17 encoding rate ~~coded sequence~~.

12. (Original) The method of claim 1, wherein detecting the synchronization mark
comprises detecting an even number of 1s between peaks and ^{an}~~the~~ error pattern "101" around a
peak.

13. (Currently Amended) A system for providing synchronization in a binary data
stream, comprising:
means for receiving ~~[[a]]~~ the binary data stream;

20. (Currently Amended) The system of claim 13, wherein a data section of the received binary data stream is encoded at an encoding rate of m/n .

21. (Original) The system of claim 20, wherein the synchronization mark comprises 01000100001010001 and the m/n encoding rate comprises a 16/17 encoding rate.

22. (Currently Amended) The system of claim 20, wherein the data section is encoded at [[an encoded]] the encoding rate of m/n and ^a~~the~~ resynchronization mark comprises a fixed plurality of bits equivalent to bytes of the encoded binary data stream.

23. (Currently Amended) The system of claim 22, wherein the resynchronization mark comprises 1000000000100000000001000000000001 and the m/n encoding rate ~~encoded~~ bit-sequence comprises a 16/17 encoding rate ~~coded-sequence~~.

24. (Original) The system of claim 13, wherein the means for detecting the synchronization mark detects an even number of 1s between peaks and ^{an}~~the~~ error pattern "101" around a peak.

25. (Currently Amended) The system of claim 13, further comprising:
[[a]] ^(I/O)an Input/Output device, wherein the system for providing the synchronization is implemented in the I/O device.

26. (Original) The system of claim 25, wherein the I/O device comprises a magnetic tape drive.

27. (Currently Amended) An article of manufacture including code for providing synchronization in a binary data stream, wherein the code causes operations to be performed comprising:

receiving [[a]] the binary data stream;
generating a synchronization mark having at least one isolated peak into at least one point in the binary data stream;

34. (Currently Amended) The article of manufacture of claim 27, wherein a data section of the received binary data stream is encoded at an encoding rate of m/n.

35. (Original) The article of manufacture of claim 34, wherein the synchronization mark comprises 01000100001010001 and the m/n encoding rate comprises a 16/17 encoding rate.

36. (Currently Amended) The article of manufacture of claim 34, wherein the data section is encoded at [[an encoded] the encoding rate of m/n and ^a~~the~~ resynchronization mark comprises a fixed plurality of bits equivalent to bytes of the encoded binary data stream.

37. (Currently Amended) The article of manufacture of claim 36, wherein the resynchronization mark comprises 1000000000100000000001000000000001 and the m/n encoding rate ~~encoded-bit-sequence~~ comprises a 16/17 encoding rate ~~eeded-sequence~~.

38. (Original) The article of manufacture of claim 27, wherein detecting the synchronization mark comprises detecting an even number of 1s between peaks and ^a~~the~~ error pattern "101" around a peak.